

CLAIMS

1. A winding method for a stator of an electric motor, which
is employed for carrying out stator windings around magnetic
5 poles disposed radially in a stator core, the method
comprising:

a first winding step of winding a first coil around a
magnetic pole corresponding to a phase until a nozzle
interferes with a wound conductor, the coil being wound
10 according to a nozzle winding method of rotating, relative
to the magnetic pole, the nozzle inserted in a slot formed
by the adjacent magnetic poles and magnetic pole protrusions
of the stator core;

a nozzle moving step of retracting the nozzle having been
15 inserted in the slot from an area interfering with the first
coil; and

a second winding step of winding a second coil in series
on the first coil according to a hook winding method of moving
a conductor supplied from the nozzle to a prescribed position
20 by using a hook provided on a coil end of the stator core while
rotating the nozzle relative to the magnetic pole on a
retracting position of the nozzle moving step.

2. A winding method for a stator of an electric motor, which
25 is employed for carrying out stator windings around magnetic
poles disposed radially in a stator core, the method
comprising:

a first winding step of winding a first coil around a
magnetic pole corresponding to a phase until a nozzle
30 interferes with a wound conductor, the coil being wound
according to a nozzle winding method of rotating, relative
to the magnetic pole, the nozzle inserted in a slot formed
by the adjacent magnetic poles and magnetic pole protrusions
of the stator core;

a step of cutting a last winding end wire of the first coil while depositing the winding end wire on a predetermined position, and depositing a first winding start wire of the second coil on the predetermined position; and

5 a second winding step of winding a second coil in series on the first coil, which has been wound in the first winding step, according to a hook winding method of moving a conductor supplied from the nozzle to a prescribed position by using a hook provided on a coil end of the stator core while rotating
10 another nozzle relative to the magnetic pole on a position retracting from an interference area of the nozzle and the first coil.

3. The winding method for the stator of the motor according
15 to claim 1 or 2, wherein the rotation of the nozzle relative to the magnetic pole in the first winding step is a rotation made by the nozzle.

4. The winding method for the stator of the motor according
20 to claim 1 or 2, wherein the second coil wound in series with the first coil is wound around one magnetic pole in the second winding step by moving the conductor substantially in a radial direction along center lines of the slots adjacent to each other on both sides of the magnetic pole by using two hooks
25 provided on the coil end.

5. The winding method for the stator of the motor according
30 to claim 1 or 2, wherein the conductor supplied from the nozzle is moved to a prescribed position by a hook provided on the coil end of the stator core, the conductor held by the hook on the coil end of a winding side is released, and winding is carried out while a slack wire is eliminated by a hook holding the conductor on the other coil end.

6. The winding method for the stator of the motor according to claim 1 or 2, wherein winding is sequentially carried out continuously via a crossover in the first winding step or the second winding step.

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7. The winding method for the stator of the motor according to claim 1, wherein the first coil, the second coil, and the first and second coils in each phase are sequentially wound continuously via a crossover.

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